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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/538,055	03/31/2006	Gijsbertus Johannes Verduijn	790063.00090	8515

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EXAMINER

DEUBLE, MARK A

ART UNIT	PAPER NUMBER
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3651

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/05/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/538,055

Applicant(s)

VERDUIJN ET AL.

Examiner

Mark A. Deuble

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 10 and 11 is/are rejected.
- 7) ☒ Claim(s) 8-9 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 6/8/2005.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 10-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 10 recites the limitation "the sliding surfaces" in line 2. There is insufficient antecedent basis for this limitation in the claim. It appears that the claim should depend from claim 8 in order to provide proper antecedent basis for the term.

Claim 11 recites the limitation "the projections"" in line 2-3. There is insufficient antecedent basis for this limitation in the claim. It appears that the claim should depend from claim 8 in order to provide proper antecedent basis for the term.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-2 and 4-6 are rejected under 35 U.S.C. 102(b) as being anticipated by German document number 4338505.

The German document shows a guide bend segment for a modular conveyor 5/6 made from a pair of curved plastic parts 1 with straight run-in and run-out segments forming a substantially

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flat upper side extending along an axis in a curved manner. The segment includes a guide face with three guides 3 which guide the modules of modular conveyor chain. The guides 3 form two grooves proceeding in the longitudinal direction of the profile so that the profile has a substantially E-shaped cross section with a central projection 3 located between the grooves and with legs 3 located outside the grooves on inside and outside bend sides of the projection. The legs and the projection include magnets 8 detachably connected to the profile by variable magnetic holding parts adjacent the guide face that would pull the body parts of successive modules of a chain to be guided against the upper side of the profile through cooperation with magnetic hinge pins of a module chain. Thus The German document shows all the structure required by claims 1-2 and 4-6.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over German document number 4338505 in view of van Zijderveld (U.S. Patent No. 6,085,896).

The German document shows generally all the structure required by the claims except for the magnets removably connected by means of a closing plate. However, van Zijderveld shows a guide bend segment for a modular conveyor that uses a ferromagnetic closure plate 11 to detachably connect magnets 10' to the guide bend segment. Van Zijderveld teaches that using a ferromagnetic closure plate to secure the magnets to the guide bend segment advantageously

increases the force of attraction exerted on the hinge pins of the conveyor. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to use a ferromagnetic closing plate to secure the magnets 8 of the German document to the guide bend segment in order to advantageously increase the force of attraction exerted on the modular conveyor chain according to the teachings of van Zijderveld. When this is done, the resulting apparatus would have all the structure required by claim 1-6.

Furthermore, assuming for the sake of argument, that the German document does not show magnets that are detachably connected to the guide bend segment, it should be noted that when the magnets of the German document are connected to the guide bend segment using the closing plate taught by van Zijderveld, the magnets would be detachably connected to the guide bend segment as required by claim 4.

7. Claims 7 and 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over German document number 4338505 in view of Langhans et al. (U.S. Patent No. 4,823,939).

The German document shows generally all the structure required by the claims except for the central projection provided with a side face on an outside bend proceeding in an inwardly converging manner from the upper side of the profile towards the base required by claim 7, except for the corresponding sliding surface at the sides facing each other of the projections of the modular conveyor belt that converge away from the body part required by claim 10, and for the projections provided with insert pieces forming the sliding faces required by claim 11. However, Langhans et al. shows a guide bend segment 2 with a groove having a side face 7 on an outside bend proceeding in an inwardly converging manner from the upper side of the upper side of the profile towards the base and a corresponding sliding surface formed by an insert piece

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10 forming the side of a modular conveyor belt that converges away from the body part.

Langhans et al. teaches that this arrangement advantageously improves the guidance of the conveyor belt. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the central projection of the German document with a side face on an outside bend that proceeds in an inwardly converging manner from the upper side of the profile towards the base and to provide the modular conveyor belt of the German document with a corresponding sliding surface formed by insert pieces that converge away from the body part at the sides facing each other of the projections of the modular conveyor belt in order to improve guidance of the conveyor belt. When this is done the resulting apparatus would have all the structure required by claims 1-2, 4-7 and 10-11.

8. Claims 1-2, 4-7, and 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Damkjaer (U.S. Patent No. 5,127,515) in view of Wallaart (U.S. Patent No. 4,642,298).

Damkjaer shows a guide bend segment 9 for a modular conveyor 4 with steel hinge pins that is made from several integral profile parts with straight run-in and run-out segments forming a substantially flat upper side 2 extending along an axis in a curved manner. The segment includes a guide face with three guides formed by a central projection member 6 and the side members extending upwardly to the upper side 2 which guide the modules of modular conveyor chain. The guides form two grooves on either side of the projecting member 6 proceeding in the longitudinal direction of the profile so that the profile has a substantially E-shaped cross section with the central projection 6 located between the grooves and with legs located outside the grooves on inside and outside bend sides of the projection. The central projection has a side face 17 on an outside bend that proceeds in an inwardly converging manner from the upper side of the

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profile towards the base that corresponds with sliding surfaces 13 of insert pieces 5 forming projections on the underside of the conveyor belt module body. The surfaces 13 converge away from the body part at the sides facing each other of the projections of the modular conveyor belt in order to improve guidance of the conveyor belt. Thus Damkjaer shows all the structure required by the claims except for the magnets detachably connected to the legs of the guide bend segment. However, Wallaart shows a guide bend segment 1 for a modular conveyor belt that has magnets detachably connected within the legs 2/3 of the segment. Wallaart teaches that the magnets in the legs advantageously hold the conveyor belt against the top surface of the guide bend segment to insure smooth running of the conveyor belt. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the legs of the guide bend segment of Damkjaer with detachably connected magnets in order to hold the conveyor belt against the top surface of the guide bend segment to insure smooth running of the conveyor belt according to the teachings of Wallaart. When this is done the resulting apparatus would have all the structure required by claims 1-2, 4-7 and 10-11.

9. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Damkjaer in view of Wallaart as applied to claims 1-2, 4-7 and 10-11 above, and further in view of van Zijderveld.

The apparatus of Damkjaer as modified according to the teachings of Wallaart would show generally all the structure required by claim 3 except for the magnets removably connected by means of a closing plate. However, van Zijderveld shows a guide bend segment for a modular conveyor that uses a ferromagnetic closure plate 11 to detachably connect magnets 10 to the guide bend segment. Van Zijderveld teaches that using a ferromagnetic closure plate to secure the magnets to the guide bend segment advantageously increases the force of attraction

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exerted on the hinge pins of the conveyor. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to use a ferromagnetic closing plate to secure the magnets to the legs of the guide bend segment of the apparatus of Damkjaer as modified according to the teachings of Wallaart in order to advantageously increase the force of attraction exerted on the modular conveyor chain according to the teachings of van Zijderveld. When this is done, the resulting apparatus would have all the structure required by claim 1-7 and 10-11.

Allowable Subject Matter

10. Claims 8-9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The cited prior art not discussed above shows various guide bend segments for modular conveyor belts that are similar to that of the present invention.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark A. Deuble whose telephone number is (571) 272-6912.

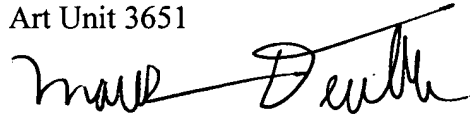
The examiner can normally be reached on Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene O. Crawford can be reached on (571) 272-6911. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Mark A. Deuble
Examiner
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A handwritten signature in black ink, appearing to read 'Mark Deuble', written over a horizontal line.

md